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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/324,905	06/02/1999	RAY A. BITTNER JR.	MS1-317US	2156

22801 7590 05/16/2003

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EXAMINER	
VO, LILIAN	

ART UNIT	PAPER NUMBER
2127	5

DATE MAILED: 05/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PR4

Office Action Summary	Application No.	Applicant(s)	
	09/324,905	BITTNER ET AL.	
	Examiner	Art Unit	
	Lilian Vo	2127	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 June 1999* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *02 June 1999* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. Claims 1 – 32 are presented for examination.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1, 2, 4 – 8, 10 – 13, 15, 16, 18 – 20, 22 – 26, 28 – 30, and 32 are rejected under 35 U.S.C. 102(e) as being anticipated by Yamada et al. (US Pat. 6,088,780).

Regarding **claim 1**, Yamada et al. disclose in a computing device having a processor that generates a first address signal of a first width and one or more peripheral devices that are addressed with a second address signal of a second width that is greater than the first width,

wherein the second address signal is produced in the computing device by concatenating an address extension from an address extension register with the first address signal, a method comprising:

concurrently executing threads of a plurality of application programs, wherein different ones of the threads indicate one or more address extensions to an to operating system (col. 8, line 54 – col. 9, line 3);

storing the address extensions for use by the operating system (col. 8, line 54 – col. 9, line 3, col. 10, lines 15 - 20);

repeatedly switching between execution of the threads (col. 8, line 54 – col. 9, line 3, col. 10, lines 15 - 20); and

prior to executing a particular thread, writing the address extension of the base address indicated by the particular thread to the extension register (col. 10, lines 15 - 20).

Regarding **claim 2**, Yamada et al. disclose a method as recited in claim 1, wherein the address extensions are indicated as a value of the second width (col. 8, lines 9 – 21, col. 2, lines 49 - 57).

Regarding **claim 4**, Yamaha et al. inherently disclose a method as recited in claim 1, further comprising calling an operating system device driver from one of the threads, wherein the device driver invokes an initialization function to indicate the one or more base addresses (col. 10, lines 15 – 18, col. 8, lines 56 – 62, col. 9, lines 1 – 3, each context switching between the processes, OS stores the virtual address extension for the program to next be executed in the virtual address extension register.) Hence, the initialization function to indicate the base

addresses is inherently invoked in order for multitasking to be performed correctly, enable context switching by storing virtual address extension associated with each process.

Regarding **claim 8**, it is rejected on the same ground as stated above. Yamada et al. furthermore, disclose:

storing the address extension in a location other than the extension register (col. 9, lines 1 – 3: main memory).

Claims 5 – 7, 10 – 13, 15, 16, 18 – 20, 22 – 26, 28 – 30, and 32 are rejected on the same ground as stated above.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 3, 9, 14, 17, 21, 27 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada et al (US 6,088,780) in view of applicants' admitted prior art.

Regarding **claim 3**, Yamada et al. did not clearly disclose a method as recited in claim 1, wherein individual address extensions identify address ranges associated with one or more peripheral devices. Nevertheless, this feature is shown by the applicants' admitted prior art, where each device is assigned with an address range (specification page 2, lines 1 – 3, page 3, lines 6 – 21). Therefore, it would have been obvious for one of ordinary skill in the art, at the

time the invention was made, to incorporate this feature to Yamada et al. invention so that each device may be accessible within its address ranges.

Claims 9, 14, 17, 21, 27 and 31 are rejected on the same ground as stated above.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lilian Vo whose telephone number is (703) 305-7864.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Lilian Vo
Examiner
Art Unit 2127

lv
May 12, 2003

JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100